

REMARKS

Claims 1-18 are pending in the present application and are subject to both a restriction and an election requirement.

Restriction Requirement - 35 U.S.C. § 121

The Outstanding Office Action states that the application contains claims directed to the following patentably distinct species of the claimed invention:

- I. Claims 1-7 and 16-17, drawn to a vented shield system and method of venting thereof for a plasma arc torch, classified in class 219, subclass 121.48;
- II. Claims 8-12 and 18, drawn to another vented shield system and method thereof, classified in class 219, subclass 121.5;
- III. Claim 13, drawn to a shield cup body, classified in class 219, subclass 121.51; and
- IV. Claims 14-15, drawn to an apparatus for use in venting gas, classified in class 219, subclass 121.55.

Applicant respectfully traverses this restriction requirement on the grounds that each of the claims are directed to the common subject matter of a vented shield system for controlling the flow of a secondary gas in different cutting modes, e.g., drag, mechanized, gouging, deflecting. Depending on the mode of cutting, different amounts of secondary gas must be vented and thus the claimed invention provides a vented shield system that accommodates each of these different modes of cutting through the use of a different style of shield cap while other components of the plasma arc torch need not be changed, e.g, shield cup body. These claims **are** related because they are capable of being used together as part of a common vented shield system.

The restriction requirement further states that the separate inventions are "recognized divergent subject matter." Applicant respectfully disagrees. The claimed subject matter is directed to the common subject matter of a vented shield system, and more specifically, a vented shield system that controls the flow of secondary gas. When

each of the claims is directed to a vented shield system or apparatus to control the flow of secondary gas, clearly this cannot be “divergent subject matter.” Moreover, the fact that each of the inventions falls within the same general search class and subclasses also indicates that the subject matter is not divergent.

Further, the restriction requirement states that the “inventions are unrelated if it can be shown that they are not disclosed as capable of use together ...” citing MPEP § 806.04 and 808.01. However, the claims are capable of use together in a common vented shield system as previously set forth. In stark contrast, the examples cited in the MPEP include: “An article of apparel such as a shoe, and a locomotive bearing would be an example. A process of painting a house and a process of boring a well would be a second example.” *MPEP § 806.04*. In light of these examples, it would seem apparent that claims directed to a common vented shield system for use in a plasma arc torch that specifically deals with venting a secondary gas would not be unrelated inventions.

The restriction requirement also states that each of the allegedly distinct inventions are all under class 219 with invention I in subclass 121.48 (plasma torch structure), invention II in subclass 121.5 (nozzle system), invention III in subclass 121.51 (gas supply system), and invention IV in subclass 121.55 (gas supply), when in fact each of the claims could easily fall within subclass 121.51 since they all relate to the venting of a secondary gas. (The subclass definition for this subclass includes “Subject matter including structure for delivering working and shielding gases.” Manual of Patent Classification). Furthermore, subclass 121.55 is indented under subclass 121.54, control systems, which includes “Subject matter including a system to regulate the associated components of a plasma system,” and does not fall under the subclass

121.48 as do the other subclasses cited in the restriction requirement. And typically, this subclass is related to power supplies and related control systems. Accordingly, Applicant respectfully questions the characterization of invention IV in subclass 121.54. Moreover, it is common knowledge that a single invention may be classified in more than one class/subclass combination. Therefore, the existence of multiple subclasses should not be a grounds for restriction requirement and the fact that each of the claims falls under subclass 121.51 (which is indented under 121.48) and at the least all fall under 121.48, the subject matter cannot be “divergent.”

For at least these reasons, Applicant respectfully requests that the restriction requirement be withdrawn and that all of the claims be prosecuted in this single application. However, in accordance with the requirements of the Outstanding Office Action, Applicant elects Invention I with claims 1-7, and 16-17, with traverse.

Election Requirement - 35 U.S.C. § 121

The Outstanding Office Action also states that the application contains claims directed to the following patentably distinct species of the claimed invention:

- Specie I: Figures 1-5;
- Specie II: Figures 6-7;
- Specie III: Figure 8; and
- Specie IV: Figure 9

The Outstanding Office Action further states that the Applicant is required to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The Outstanding Office Action states that currently, no claim is generic.

Applicant respectfully traverses this election requirement as the Examiner has identified distinct species based on the use of different shield caps that correspond with the different cutting modes within a common vented shield system. As previously explained, different amounts of secondary gas must be vented according to these different cutting modes and thus the claimed invention provides a vented shield system that accommodates each of these different modes of cutting through the use of a different style of shield cap. Furthermore, the vented shield system illustrated in Figures 6 and 7 comprise the claimed flow control member as does Figures 1-5. The only difference is the front end style of the shield cap, a difference which is not included in the claims. (i.e., the claims for figures 1-5 and 6-7 are the same). Similarly, the vented shield system illustrated in Figures 8 and 9 comprise the claimed annular ridge. Again, the only difference is the front end style of the shield cap, a difference which is not included in the claims. (i.e., the claims for figures 8 and 9 are the same).

Applicant also submits that while these species are distinct, they are so closely related that no additional searching would be required by the Examiner. A search of the relevant classes, as set forth above and also included within the restriction requirement itself, for the claimed invention would provide results applicable to all the species identified by the Examiner. Applicant submits that these distinct species fall within the same general search classes, (i.e., 219/121.48, 219/121.5, 219/121.51), and respectfully request that the election requirement be withdrawn.

However, in accordance with the requirements of the Outstanding Office Action, Applicant elects the species in Figures 1-5. The Claims that correspond with this species include: 1-7, 13, and 14-17.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the Outstanding Office Action, and as such, the present application is in condition for further prosecution. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7524.

Respectfully Submitted,

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